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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,193	11/19/2001	Manuel Barbosa	11017-0003	8121

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CLARK & BRODY
Suite 600
1750 K Street, NW
Washington, DC 20006

EXAMINER


NGUYEN, XUAN LAN T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/988,193	Applicant(s) BARBOSA, MANUEL 	
	Examiner Lan Nguyen	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6,7,9,10,12 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6,7,9,10,12 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 4 of claim 9 should read as followed in order to clearly define the claimed structure: --said brake components, and an abutment plate of smaller structural area than a structural area of said shielding plate, said abutment plate --.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneshiro et al.

Re: claim 4, Kaneshiro et al. show a backing plate for a drum brake assembly, as in the present invention, comprising: an abutment plate 3, 5, 6 comprising a first part 6 configured to be attached to an axle housing of a vehicle and a second part 5 extending from said first part 6 and configured to resist braking forces applied thereto by brake

shoes during braking, and a shielding plate 2 extending radially beyond said abutment plate and configured to shield brake components, wherein the area occupied by said abutment plate is less than that occupied by said shielding plate, as shown in figure 1, said shielding plate is configured to support a hydraulic cylinder 4 for operating said drum brake, said abutment and shielding plates are made of different materials, and said shielding plate is made of damped steel that dampens noise and vibrations, as disclosed in page 6 of the translation. Note that the claimed feature "configured to be attached" has been treated broadly as recited by Applicant; wherein first part 6 of Kaneshiro is "configured to be attached" to the axle housing via a number of parts in between the first part and the axle housing so that the brake assembly would be operating properly.

Re: claim 9, Kaneshiro et al. show a shielding plate, as in the present invention, comprising: a sheet of damped steel, as described in page 6, configured to be attached to a vehicle and at least partially encompass brake components to protect said brake components from dust and dirt, as shown in figure 1, and to support a hydraulic cylinder 4 to operate said brake components, and an abutment plate 3, 5, 6 of smaller structural area than a structural area of said shielding plate, said abutment plate configured to engage a vehicle housing and to engage brake shoes and to resist braking forces applied by said brake shoes at anchor block 5, wherein said abutment plate and shielding plate are made of different materials. Note that the claimed feature "configured to engage" has been treated broadly as recited by Applicant; wherein the abutment plate of Kaneshiro is "configured to engage" a vehicle housing via a number of parts in

Art Unit: 3683

between the abutment plate and the vehicle housing so that the brake assembly would be operating properly.

Re: claim 10, Kaneshiro et al. show the drum brake in figure 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro.

Re: claim 7, Kaneshiro's backing plate, as rejected in claim 4, is silent of the material for the abutment plate. The Examiner takes an Official Notice that steel is an old and well-known material to be used in the construction of brake assemblies due to its durability and strength. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's abutment plate using steel since steel is an old and well known material to be used in the construction of brake assemblies due to its durability and strength.

Re: claims 18 and 19, the thicknesses of the steel and the damped steel are considered design choices and would have depended on the requirements of each application to dampen the required vibration and noise. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed

Art Unit: 3683

Kaneshiro's abutment plate and shielding plate with certain thicknesses in order to satisfy different requirements of each application to dampen the required vibration and noise.

7. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al. in view of Hansen et al.

Kaneshiro's backing plate assembly and shielding plate, as rejected in claims 4 and 9, lack the claimed feature of two layers of steel of approximately equal thickness. Hansen et al. teach the structure of a damped steel wherein the two outer steel sheets are of equal thickness in column 3, lines 60-63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's backing plate assembly and shielding plate with a damped steel such as taught by Hansen et al.; since said damped steel which consists of two outer steel sheets of equal thickness exhibits superior dampening capability over a wide range of temperature as taught by Hansen and would increase the performance and prolong the life of the backing plate assembly and of the shielding plate of Kaneshiro.

8. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchholz et al. (DE4203173) in view of Kaneshiro.

Re: claim 15, Buchholz et al. show a drum brake, as in the present invention, comprising: an abutment plate 4, 5 comprising a sheet of material having a first part surrounding bolt holes 16 configured to attach to an axle housing and a second part surrounding the anchor block 12 configured to resist braking forces applied by brake shoes, and a shielding plate 5 attached to said abutment plate 4 and configured to

Art Unit: 3683

support said brake shoes 7, 7, wherein said abutment plate 4 and said shielding plate 5 are constructed to dampen vibrations and noise, as stated in the Abstract. Buchholz is silent of the materials being used for the abutment plate and the shielding plate.

Kaneshiro teaches the concept of using a vibration dampening material in the construction of the shielding plate to reduce vibration and noise in a brake system. The Examiner takes an Official Notice that steel is an old and well-known material to be used in the construction of brake assemblies. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the teaching of Kaneshiro by using the vibration dampening material in the construction of the shielding plate of Buchholz and using steel for the construction of the abutment plate of Buchholz in order to improve the vibration and noise dampening capability of the brake assembly as taught by Kaneshiro, at the same time using a well known and readily available material of steel for the abutment plate.

Re: claim 16, Buchholz shows said shielding plate 5 is configured to receive a hydraulic cylinder 9.

Re: claim 17, Kaneshiro teaches said sound dampening material comprises damped steel comprising two sheets of steel, as described in page 6.

Response to Arguments

9. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

10. It is noticed that claim 5 was not present in the Amendment dated 7/16/04. Please include claim 5 in the next Response in order to meet the requirement of a "complete listing of claims".

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

Art Unit: 3683

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen
Patent Examiner
Art Unit 3683

Lan Nguyen
10/12/04